

AMENDMENTS TO THE CLAIMS

Claims 1-36 (Canceled).

Claim 37 (Currently amended): An isolated nucleic acid comprising a nucleic acid that specifically hybridizes with a nucleic acid encoding the polypeptide of SEQ ID NO:33 under stringent conditions comprising 0.2x SSC wash at 65°C and that encodes a polypeptide having bilin reductase activity.

Claim 38 (Currently amended): The nucleic acid of claim 37, wherein said nucleic acid is comprises a vector.

Claims 39-79 (Canceled).

Claim 80 (Currently amended): The nucleic acid of claim 38, wherein said vector is present in a a cell.~~The cell of claim 35, wherein said heterologous nucleic acid encodes an amino acid sequence of a polypeptide selected from the group consisting of HY2, athy2, slr0116, c362_anab, yep2_synpy, yep3_synpy, PeyA_ANASP, PeyA_NOSPU, PeyA_SYNY3, PeyA_SYN81, PeyA_PROME, PebA_SYNPY, PebA_SYN81, PebA_PROMA, PebA_PROME, PebA_NOSPU, PebB_SYNPY, PebB_SYN81, PebB_PROMA, PebB_PROME, PebB_NOSPU, HY2_ARATH, RCCR_ARATH, and RCCR_HORVU,~~

Claims 81-82 (Canceled).